



# CDF Operations

Steve Hahn

April 3, 2006

All Experimenters' Meeting

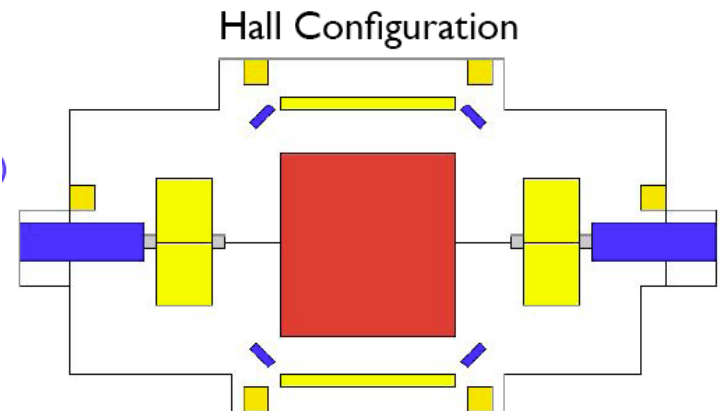


# CDF Operations

## ☛ March: Week-by-week

### ➤ Week 2: March 6 to March 12

- ➔ Hardware EVB shutdown for additional EVB crates and “load balancing” to increase L2→L3 bandwidth
- ➔ COT switched to N<sub>2</sub>; HV locked out every night while flammable gas still in muon chambers
- ➔ CMP (muon chambers below central detector) channels fixed
- ➔ Muon walls (east, west, north & south) and muon arches (NW, SW, NE, SE) pulled out so central and endwalls (and electronic crates) are accessible
- ➔ Begin program of upgrading and checking CAEN HV power supplies (plug, silicon, central preradiator) — continuing throughout shutdown
- ➔ Low beta quad Kautzky valves repaired
- ➔ Tevatron magnet rolls measured (CDF grad students/post-docs helped)
- ➔ 400 Hz motor generators refurbished and tested





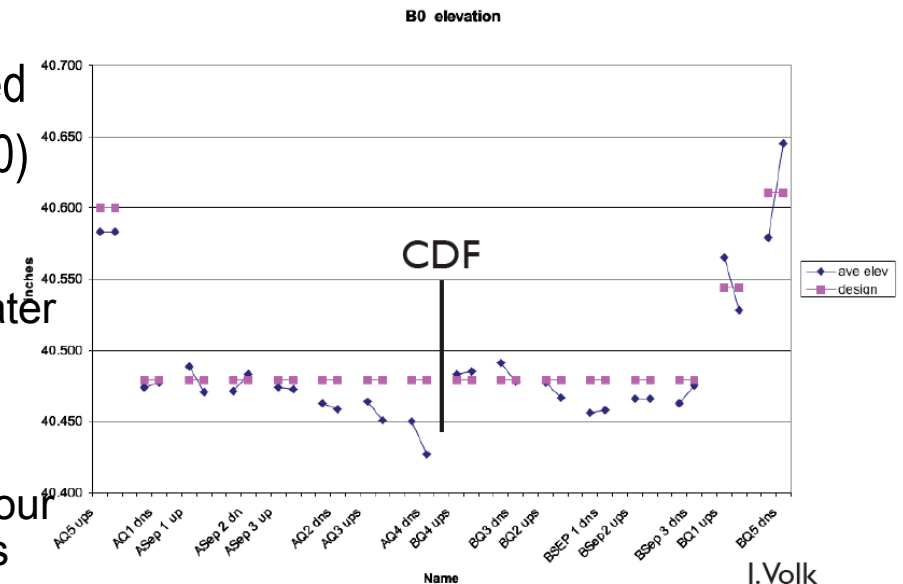
# CDF Operations

## ☛ March: Week-by-week (continued)

### ➤ Week 3: March 13 to March 19

- ➔ All gas chambers switched to  $N_2$ ; muon chambers with HV problems painted with corona dope and tested beforehand
- ➔ Upgrade of control room: new monitors (all LCD) and Linux computers
- ➔ Detector elevation survey completed
- ➔ March 18 power outage (0700-1500)
  - ➔ Some problems: rented diesel generator for cryo plant, SVX heaters, SVX backup chilled water pump, temperature in 3rd floor computer room — all fixed or mitigated
  - ➔ Good news: all UPSes (?) and our own diesel generator worked as expected

## Magnet Positions



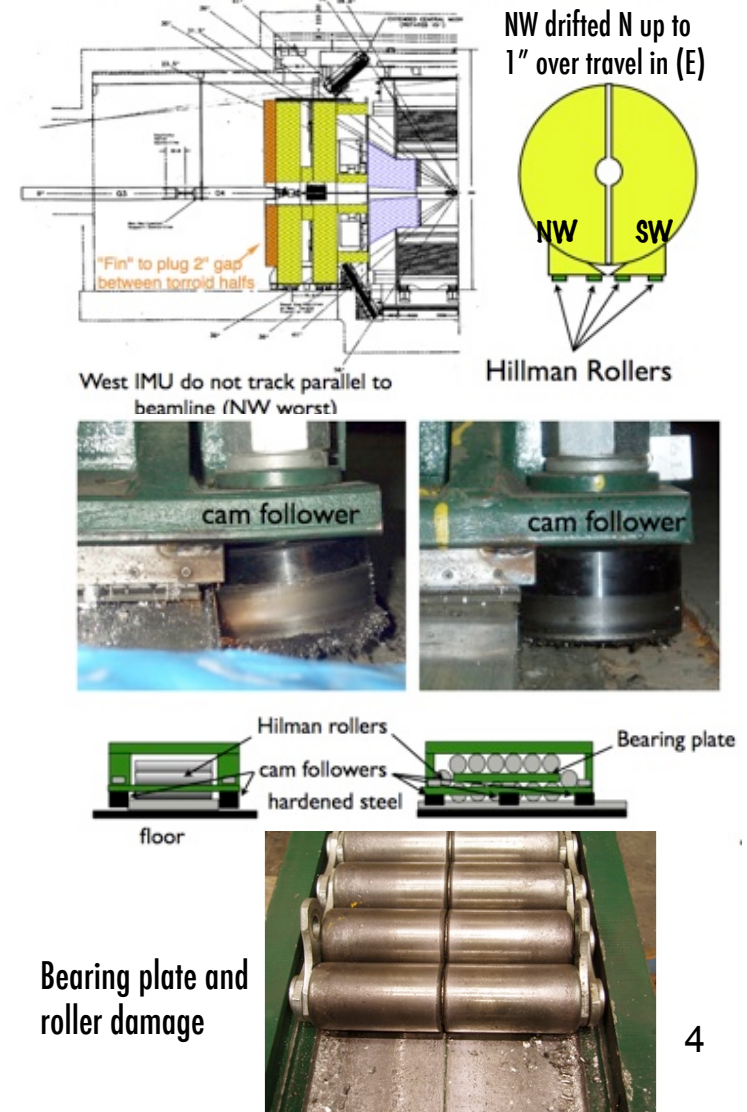


# CDF Operations

## ➡ March: Week-by-week (continued)

### ➤ Week 4: March 20 to March 26

- ➡ Accidental power off of building power due to chiller electrical work — good test of separation of building power and experimental power
- ➡ NW muon wall (IMU) lifted and Hillman roller replaced and tested; certainly will do SW IMU and maybe NE IMU; in contact with Hillman, will try to refurbish NW Hillman roller



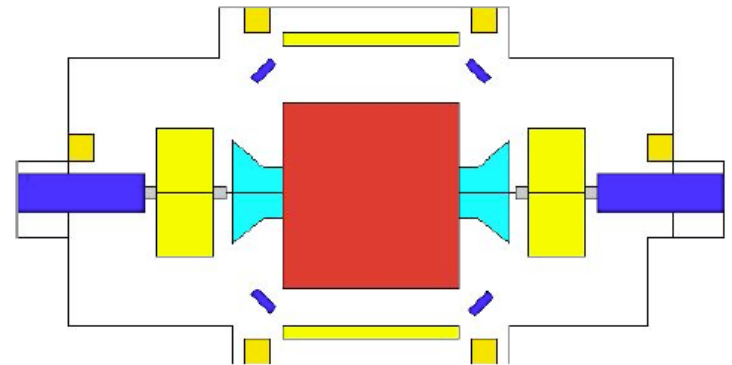


# CDF Operations

## ☛ March: Week-by-week (continued)

### ➤ Week 5: March 27 to April 3

- ➔ Hadron and E-M timing crates Run IIB TDC upgrade
- ➔ Hardware EVB hardware completed; hope to use with DAQ this week or next
- ➔ “Slow controls” PC upgrades almost done
- ➔ Endplugs pulled out today
  - ➔ COT noise reduction work to increase effectiveness of XFT upgrade at high luminosity
  - ➔ Silicon work
  - ➔ WHA PMT work
- ➔ Power outage no problem this morning, except diesel generator ran but did not deliver power; understood





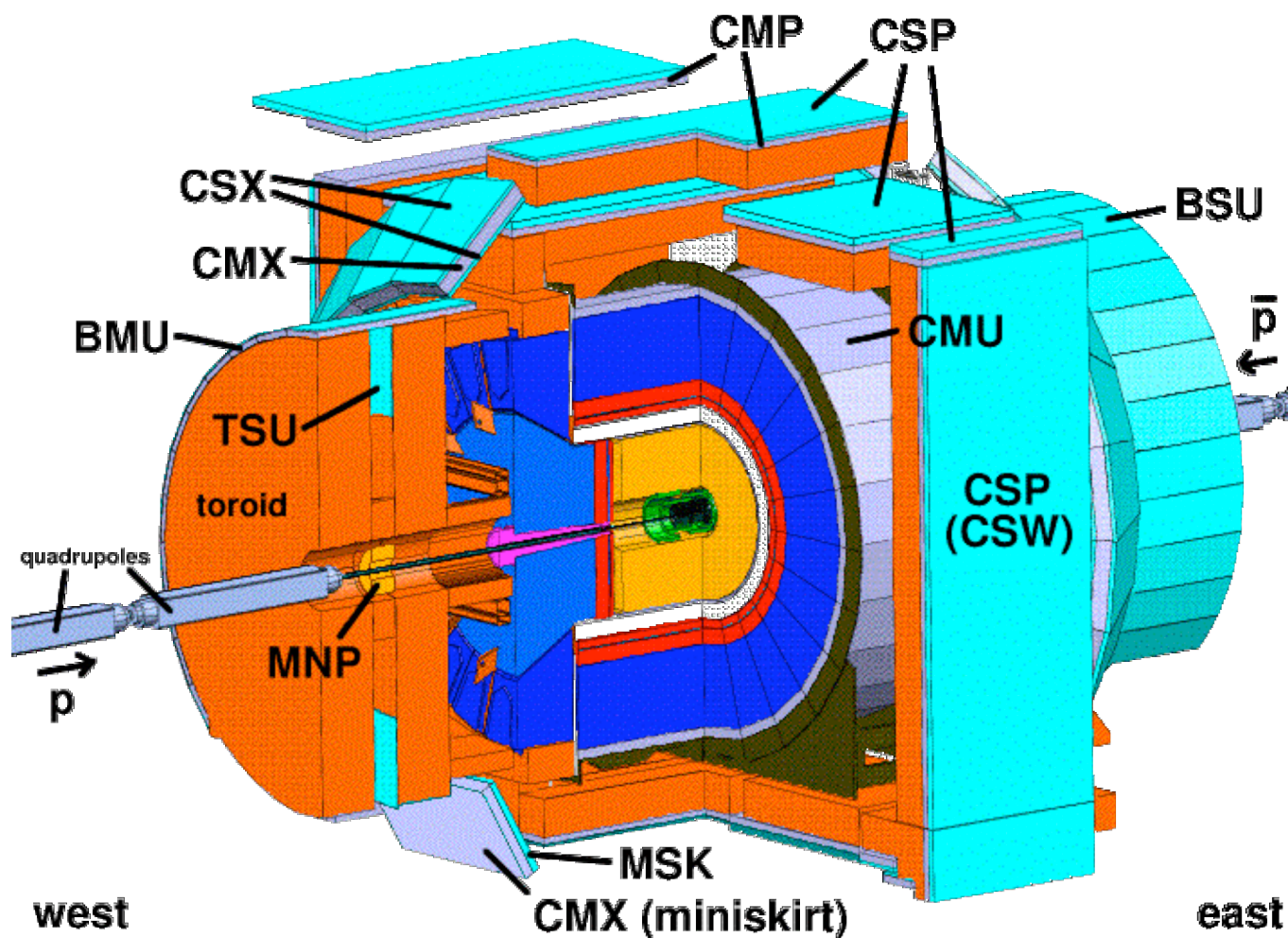
# Important Dates

Date	
2/27	<b>Shutdown begins</b>
2/27	Open Collision Hall, begin detector work
2/27 - 6/1	No Owl shifts (Cryo: 3/6 - 5/22): <b>HV off at night!</b>
3/1 - 4/6	No Hardware Event Builder
3/7	Open all steel, full detector access
3/15 - 3/29	Hilman roller replacement (NW IMU steel)
3/13	Chambers off flammable gas
3/18	<b>8 hour power outage to B0 and trailers</b>
4/3 - 4/26	Solenoid bore access
4/3	<b>1/2 hour site wide power outage</b>
4/24	<b>1/2 hour site wide power outage</b>
5/1	Flammable gas to COT (test recirculation system)
5/12	Restrict access to collision hall
5/12 - 5/25	Cosmic rays, Calibration and debugging
5/25	<b>Tevatron Cold</b>





# CDF Run IIB Detector





# CDF Run IIB Detector (inner)

